

### **REMARKS**

Claims 1 and 3-37 are all the claims presently pending in the application. Claims 1, 13, 20, 25, and 33 are amended to more clearly define the invention. Claim 38 has been added. Claim 2 remains canceled. Claims 1, 13, 20, 25, and 33 are independent.

These amendments are made only to more particularly point out the invention for the Examiner and not for narrowing the scope of the claims or for any reason related to a statutory requirement for patentability.

Applicants also note that, notwithstanding any claim amendments herein or later during prosecution, Applicants' intent is to encompass equivalents of all claim elements.

Claims 1 and 3-37 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Burke et al. (U.S. Patent No. 6,782,252), in view of Sheard et al. (U.S. Patent No. 6,208,345).

This rejection is respectfully traversed in the following discussion.

#### **I. THE CLAIMED INVENTION**

An exemplary embodiment of the claimed invention, as recited by, for example, independent claim 1, is directed to a method of discovering a business object definition that includes receiving an object and a collaboration code, and determining a business object definition for the object based upon the collaboration code. The collaboration code determines the business object definition for the object without pre-defined business object definitions.

Conventional systems and methods may include object discovery agents that produce business object definitions that including mapping information between object attributes and data fields in the application data sources. However, these methods and systems must

subscribe in advance to the pre-defined business object definitions, and can only exchange business objects of the business object definitions. Changes in business object definitions often render these conventional systems and methods useless. Further, these systems and methods often need to subscribe to a very large number of business object definitions. (See Application from page 2, lines 15-25 to page 3, lines 1-20).

In stark contrast, the present invention is capable of determining a business object definition for an object based upon a collaboration code without need to include pre-defined business object definitions. (See Application at page 6, lines 15-22). In this manner, the present invention is capable of reverse engineering the composition of a business object thereby obviating the above-described problems.

## **II. THE 35 U.S.C. § 101 REJECTION**

The Examiner alleges that claims 13-20 are directed to non-statutory subject matter.

In particular, the Examiner alleges that claims 13-20 are directed to "software per se."

However, the Applicants submit that claims 13-20 are system claims and are clearly not directed to either software modules, or "software per se" as alleged by the Examiner. Also, Applicants submit that systems claims are not required to be directed to any computer-readable medium and it is improper for the Examiner to attempt to require the Applicants to amend these claims to be directed to computer-readable medium, or to recite hardware in the body.

Further, Applicants submit that the results of the claimed system as recited by at least claims 13 and 20 are useful, tangible, and concrete because the results of the claimed system are useful for determining an object definition based on the received object and collaboration code, the object definition has tangible application of meeting a system design target, and the

invention is concrete, because the invention provides a repeatable solution, within the constraints of the principles of uncertainty upon which the present invention is based.

The Examiner alleges that “*software per se*” is known as nonfunctional descriptive material, and that the (presently claimed) content is not structurally and functionally interrelated to a computer-readable medium thereby rendering it incapable of producing a useful, concrete, and tangible result. (Office Action, paragraph 4). However, the Examiner fails to provide any case law holding to support his allegations, or case law requiring that a systems claim be structurally and functionally interrelated to a computer-readable medium. This “*software per se*” test seems to have originated somewhere within the USPTO and seems to have taken on a life of its own. None of the Examiners using this rejection, including the instant rejection, has provided a case law citation, so that the terminology “*software per se*” can be reasonably defined.

Applicants can only speculate on what “*software per se*” is intended to mean, as used by this and other Examiners. Perhaps this terminology is intended to meaning the description of a software program as defined in terms of functional language.

Therefore, presuming, *arguendo*, something along this description as being the intended definition for “*software per se*”, Applicants bring to the Examiner’s attention the holding of *AT&T Corp., v. Excel Communications, Inc.* 172 F.3d 1352; 1999 U.S. App. LEXIS 7221; 50 U.S.P.Q.2D (BNA) 1447. This holding upheld the statutory subject matter of US Patent 5,333,184 to Doherty et al. Therefore, as only one example of the claims that were upheld in *AT&T*, and presumed to be “*software per se*”, is claim 1, as follows:

*A method for use in a telecommunications system in which interexchange calls initiated by each subscriber are automatically routed over the facilities of a particular one of a plurality of interexchange carriers associated with that subscriber, said method comprising the steps of:*  
*generating a message record for an interexchange call between an*

*originating subscriber and a terminating subscriber; and  
including, in said message record, a primary interchange carrier  
(PIC) indicator having a value which is a function of whether or not the  
interexchange carrier associated with said terminating subscriber is a  
predetermined one of said interexchange carriers.*

Therefore, presuming that “software *per se*” means describing software using functional steps, Applicants bring the *AT&T* holding to the attention of the Examiner and point out that, if the USPTO intends to continue rejecting software-related inventions based on wording of claims, then it is incumbent on the USPTO to develop some clear guidelines on what choice of wording is acceptable so that all examiners are using the same standard of review, instead of having undefined tests such as “software *per se*”, which is not defined in the rejection, in the Guidelines, in the MPEP, or in any case law.

Reconsideration and withdrawal of the rejection is respectfully requested.

### **III. THE PRIOR ART REJECTION**

#### **A. The Rejections based on Burke and Sheard**

The Examiner alleges that the Burke, when combined with Sheard, renders obvious claims 1 and 3-37. Applicants submit, however, that there are elements of the claimed invention which are neither taught nor suggested by Burke or Sheard.

Claim 1 recites:

*“receiving an object and a collaboration code;  
determining a business object definition for said object based upon said  
collaboration code; and  
storing said business object definition,  
wherein said collaboration code determines said business object definition  
for said object without pre-defined business object definitions.”*

Claims 13, 20, 25, and 33 recite similar claim features.

As conceded by the Examiner, Burke does not teach or suggest, “receiving an object

*and a collaboration code.*" (Office Action, page 3, paragraph 6). Sheard also fails to remedy Burke's deficiencies.

That is, Sheard does not teach or suggest the above claimed features because Sheard is not concerned about dynamically discovering collaboration code at runtime. Instead, Sheard only teaches delivery of business rules, which are not collaboration code. In fact, Sheard relies on user-provided definition as business rules. (Col. 31, line 31). For example, Sheard teaches that, "Each time an adapter is deployed, a set of meta definition file is SUPPLIED" (Col. 31, line 24). Also, Sheard teaches that, "It is noted that ... and internal field mappings must be supplied by the adapter developer". (Col. 31, line 31-34). Further, Sheard teaches that "customer-specific business rules received from the rules modules." (Col. 14, lines 28-31). In each of the examples, Sheard's teachings require that static, pre-defined rules be supplied, and does not teach or suggest the claimed collaboration code, which can be dynamically discovered without pre-defined rules.

However, to expedite prosecution, and to further define the claim features of the present invention, Applicants amend claim 1 to recite, "*wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.*" Support for these features is disclosed in at least page 11, line 5 of the specification. For reasons already discussed, neither Burke nor Sheard teach or suggest these claimed features.

Since there are features of the claims that are neither taught nor suggested by the above-cited references, reconsideration and withdrawal of the rejections is respectfully requested.

#### **IV. NEW CLAIM**

New claim 38 is added to claim additional features of the invention and to provide more varied protection for the claimed invention. Support for claim 18's recited claim features can be found in at least page 11, lines 1-8 and 14-20. The claim is independently patentable because of the novel and non-obvious features recited therein.

Specifically, neither Burke nor Sheard teach or suggest that a collaboration code comprise dynamically generated business object newly discovered during runtime.

Claim 38 is patentable over any combination of the cited references at least based on similar reasons to those set forth above with respect to claim 1.

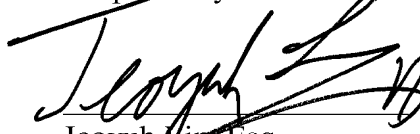
#### **V. FORMAL MATTERS AND CONCLUSION**

In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1 and 3-38, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,



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